

REMARKS

In response to the Office Action mailed September 17, 2008, Applicants respectfully request reconsideration. Claims 1-11, 13-23, 26, and 27 were previously pending in this application. Claims 1-5, 15-17, and 26 have been amended herein. As a result, claims 1-11, 13-23, 26, and 27 are pending for examination, with claims 1, 15, and 26 being independent. No new matter has been added.

Applicants respectfully submit that the claims, as amended, are in condition for allowance.

Overview of Embodiments

As an aid to the Examiner, before responding to the Office Action in detail, Applicants provide a brief overview of some exemplary embodiments of the invention.

The present application discloses a user interface framework that allows a user to interact with one or more computer applications or hosting environments (paragraphs 0028 and 0034). In some embodiments, the framework is configured to load various interface plug-ins to customize the user interface according to the specific requirements of the user (paragraph 0029). These plug-ins provide interface elements such as menu items, toolbar buttons, and status bar panels (paragraph 0029). An adapter may be used to map the interface elements provided by a plug-in to functions of a computer application (paragraph 0035). For example, if the plug-in provides a toolbar button and the user clicks on the toolbar button, the adapter signals to the computer application that a particular function should be performed.

As a further example, two different computer applications or hosting environments may use the same plug-in (paragraph 0034). In that case, two different adapters may be used, one for each computer application or hosting environment. The same interface element provided by the plug-in may be mapped to two different functions, respectively, by the two adapters. Thus, activating the interface element in the context of the first computer application or hosting environment may cause the first computer application or hosting environment to perform a first function, whereas activating

the interface element in the context of the second computer application or hosting environment may cause the second computer application or hosting environment to perform a second function.

The foregoing overview is provided solely for the convenience of the Examiner. It should be appreciated that each of the independent claims may not be limited in the manner described in the overview above. Therefore, the Examiner is requested not to rely upon the overview above for determining whether each of the independent claims distinguishes over the prior art of record, but to do so based solely upon the language of the claims themselves and the arguments presented below.

Rejections Under 35 U.S.C. 103

The Office Action rejects independent claims 1 and 26 under 35 U.S.C. 103(a) as purportedly being unpatentable over Ezekiel (US Patent No. 5625783) in view of Rine ("Using adapters to reduce interaction complexity in reusable component-based software development," 1999) and further in view of Michaelides (US Patent Publication No. 2004/0181753). The Office Action further rejects independent claim 15 under 35 U.S.C. 103(a) as purportedly being unpatentable over Ezekiel in view of Rine and Shank ("Microsoft Office 2000/Visual Basic: Programmer's Guide," April 1999) and further in view of Michaelides. Applicants respectfully disagree with each of these rejections.

I. Claim 1

Claim 1 recites, *inter alia*, a "computer implemented method of generating a componentized user interface for one or more computer applications, at least one of which is capable of performing one or more functions," and "the shell adapter maps interface elements of the first plug-in and interface elements of the second plug-in to functions of the one or more computer applications." None of the cited references, whether considered alone or in combination, discloses or suggests these limitations.

At page 4, the Office Action acknowledges that Ezekiel does not teach "the shell adapter maps interface elements of the first plug-in and interface elements of the second plug-in to functions

of the one or more computer applications.” However, at page 5, the Office Action alleges that Michaelides teaches this limitation at paragraphs 0008 and 0050. Applicants respectfully disagree.

Michaelides discloses a software tool for implementing data transformation methods that facilitate integration between applications, systems and processes (Michaelides: paragraphs 0002 and 0050). Given a source stream of data in a format associated with one system or application, the software adapter of Michaelides transforms the data into a target stream in a format associated with another system or application (Michaelides: paragraphs 0003). Examples of such transformations include migrating data from legacy systems into new systems during system upgrades, distributing travel expense data to multiple general ledger systems, and transforming field service data into inventory and work order transactions (Michaelides: paragraph 0050).

At page 5, the Office Action appears to interpret the data format conversion discussed in Michaelides as “map[ping] interface elements of the first plug-in and interface elements of the second plug-in to functions of the one or more computer applications.” Applicants respectfully disagree, because Michaelides discusses neither “interface elements” nor “functions of the one or more computer applications.” All of the examples discussed in Michaelides relate to transforming the same data from one format to another so that it can be manipulated by different systems. They have nothing to do with generating a componentized user interface for a computer application, much less mapping interface elements provided by plug-ins to functions of computer applications that use the plug-ins. Therefore, Michaelides fails to disclose or suggest the above limitation of claim 1, and claim 1 patentably distinguishes over any combination of Ezekiel, Rine, and Michaelides.

Accordingly, it is respectfully requested that the rejection of claim 1 be withdrawn.

Although not required to overcome the rejection, Applicants have amended claim 1 to more clearly point out some of the distinguishing features. As amended, claim 1 additionally recites, “in response to a user activating an interface element provided by the first plug-in or the second plug-in, causing a computer application of the one or more computer applications to perform a function, wherein the shell adapter maps the interface element to the function.” None of the cited references,

whether alone or in combination, discloses or suggests such a limitation. Therefore, claim 1 is allowable for this additional reason.

Claims 2-11, 13 and 14 depend from claim 1 and are allowable for at least the same reasons. Accordingly, it is respectfully requested that the rejections of these claims be withdrawn.

II. Claim 15

Claim 15 recites, *inter alia*, a “computer implemented method of providing extensibility to a user interface for one or more computer applications, at least one of which is capable of performing one or more functions, the method comprising: [...] providing an interface between the one or more applications and the plug-in with a shell adapter in order to utilize the second set of interface elements, wherein the shell adapter maps interface elements of the plug-in to functions of the one or more computer applications; and in response to a user activating an interface element provided by the plug-in, causing a computer application of the one or more computer applications to perform a function, wherein the shell adapter maps the interface element to the function.”

For reasons that should be clear from the foregoing, the cited references, Ezekiel, Rine, Shank, and Michaelides, fail to disclose or suggest these limitations. Therefore, claim 15 patentably distinguishes over any combination of these references, and it is respectfully requested that the rejection of claim 15 be withdrawn.

Claims 16-23 depend from claim 15 and are allowable for at least the same reasons. Accordingly, it is respectfully requested that the rejections of these claims be withdrawn.

III. Claim 26

Claim 26 recites, *inter alia*, “a method for generating a componentized user interface for a plurality of computer applications or hosting environments, at least one of which is capable of performing one or more functions, the method comprising: [...]

providing a second set of interface elements with a plug-in, the second set of interface elements comprising at least one of a toolbar, a status bar, and a menu bar;

providing a first interface between the plug-in and a first computer application or hosting environment, wherein the first interface maps interface elements of the plug-in to functions of the first computer application or hosting environment;

in response to a user activating a first interface element provided by the plug-in, causing the first computer application or hosting environment to perform a first function, wherein the first interface maps the first interface element to the first function;

providing a second interface between the plug-in and a second computer application or hosting environment, wherein the second interface maps interface elements of the plug-in to functions of the second computer application or hosting environment; and

in response to the user activating a second interface element provided by the plug-in, causing the second computer application or hosting environment to perform a second function, wherein the second interface maps the second interface element to the second function.”

For reasons that should be clear from the foregoing, the cited references, Ezekiel, Rine, and Michaelides, fail to disclose or suggest these limitations. Therefore, claim 26 patentably distinguishes over any combination of these references, and it is respectfully requested that the rejection of claim 26 be withdrawn.

Claim 27 depends from claim 26 and is allowable for at least the same reasons. Accordingly, it is respectfully requested that the rejection of claim 27 be withdrawn.

General Comments on Dependent Claims

Since each of the dependent claims depends from a base claim that is believed to be in condition for allowance, Applicants believe that it is unnecessary at this time to argue the further distinguishing features of all of the dependent claims. However, Applicants do not necessarily concur with the interpretation of the dependent claims as set forth in the Office Action, nor do Applicants concur that the basis for rejection of any of the dependent claims is proper. Therefore, Applicants reserve the right to specifically address in the future the further patentability of the dependent claims not specifically addressed herein.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

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Respectfully submitted,

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